

## **EXHIBIT 2**

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1                   UNITED STATES DISTRICT COURT  
2                   NORTHERN DISTRICT OF OHIO  
3                   EASTERN DIVISION

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4                   IN RE: NATIONAL PRESCRIPTION |  
5                   OPIATE LITIGATION                   | MDL No. 2804  
6                   This document relates to:           | Case No. 17-md-2804  
7                   Jennifer Artz v. Endo Health   | Judge Dan Aaron Polster  
8                   Solutions Inc., et al.               |  
9                   Case No. 1:19-OP-45459              |  
10                  Darren and Elena Flanagan v.   |  
11                  McKesson Corporation, et al.    |  
12                  Case No. 1:18-OP-45405            |  
13                  Michelle Frost, et al., v.     |  
14                  Endo Health Solutions Inc.,    |  
15                  et al.                                |  
16                  Case No. 1:18-OP-46327            |  
17                  Walter and Virginia Salmons,   |  
18                  et al., v. McKesson               |  
19                  Corporation, et al.               |  
20                  Case No. 1:18-OP-45268            |

21                   VIDEOTAPED DEPOSITION OF  
22                   DR. KANWALJEET ANAND, M.D.  
23                   January 28, 2020  
24                   Chicago, Illinois

1           A.     Sure.

2           Q.     And are those other -- do those  
3 other substances include benzodiazapine?

4           A.     That is correct.

5           Q.     Do they include things like alcohol?

6           A.     Yes.

7           Q.     Do they include drugs like nicotine  
8 in the form of tobacco smoking?

9           A.     Yes.

10          Q.     Do they include other drugs of  
11 abuse?

12          A.     Yes, they could.

13          Q.     Have you seen babies whose mothers  
14 have used methamphetamines, for example?

15          A.     That is correct.

16          Q.     Do you have a sense to what degree  
17 those other substances, if present, or if used  
18 by the mom, contribute to the symptomatology of  
19 a baby born with NAS?

20          A.     They certainly do, although the  
21 symptomology of NAS is quite distinct from the  
22 withdrawal syndrome from some of those other  
23 drugs.

24                      Neonatal abstinence syndrome, as it

1       is defined in the literature and as the term  
2       was promoted, you know, by the studies in the  
3       early '70s, applies to opiate withdrawal, which  
4       is, as I've listed in my report, a  
5       constellation of neurological excitability,  
6       gastrointestinal disturbances and autonomic  
7       instability, and that entire constellation  
8       comprises NAS.

9                   Opiates, as you know, are depressant  
10      drugs. They reduce neuronal excitability. And  
11      where some of these other drugs,  
12      methamphetamine -- another example is cocaine  
13      or PCP, crack, these are all stimulant drugs,  
14      so the syndrome that they produce from  
15      withdrawal is quite different.

16                  You mentioned benzodiazapines. Now,  
17      benzodiazapine is also a depressant, similar to  
18       opiates, but the benzodiazapine withdrawal that  
19      is seen is quite different from opiate  
20      withdrawal.

21                  For example, benzodiazapine  
22      withdrawal, you have a flapping-like tremor.  
23      In opiate withdrawal, you have a fine tremor.  
24      In benzodiazapine withdrawal and opiate

1 withdrawal, you both have insomnia, but in  
2 opiate withdrawal, you have hypertonicity,  
3 muscle tone is increased and the deep tendon  
4 reflexes are hyperreflexic, whereas in  
5 benzodiazepines withdrawal, it's the opposite.  
6 Muscle tone is decreased. They are actually  
7 the floppy infants. And their deep tendon  
8 reflexes are also suppressed.

9 So there are ways of differentiating  
10 benzodiazepine withdrawal from opiate  
11 withdrawal even though both of those are  
12 sedatives.

13 In benzo withdrawal, you don't get  
14 any gastrointestinal problems. There is none  
15 of the sucking, swallowing, dysphagia,  
16 retching, vomiting, diarrhea, abdominal  
17 cramping, all of those things just don't occur.

18 So those are different syndromes  
19 clinically and that's why NAS, as it is  
20 described in the literature, it's important to  
21 establish that clinical diagnosis.

22 Q. Alcohol is, likewise, a central  
23 nervous system depressant, correct?

24 A. That is correct.

1           Q.     So it would fall in the category of  
2 benzodiazepines and opioids as a central  
3 nervous system depressant?

4           A.     That is correct, absolutely.

5           Q.     Now, as is -- if you take a mom  
6 who's used multiple substances, can you predict  
7 what the outcome in the baby is going to be?

8                 And by that I mean is if I -- if you  
9 had a baby in front of you, can you know if  
10 that is a benzodiazapine, opioid, hero- --  
11 heroin, tobacco, cocaine baby as opposed to a  
12 meth, alcohol, Klonopin baby?

13          A.     The babies that will manifest with  
14 NAS, if they're occurring in the setting of  
15 other substances being abused, will clearly  
16 show signs of NAS, and I'll tell you why.

17                 When you give these things together,  
18 when you give opiates, you give, say,  
19 oxycodone, and you give benzodiazapine or  
20 alcohol or methamphetamine or Ketamine or all  
21 of these other drugs, they accelerate the rate  
22 at which tolerance occurs to the opiate.

23                 So the escalation of doses required  
24 is much higher. So when there is -- the

1 umbilical cord is cut, the prominent, most  
2 prominent symptomology you see is from the  
3 opiate withdrawal.

4 On the other hand if, like you  
5 mentioned, if there is alcohol, methamphetamine  
6 and Klonopin being abused and you add maybe,  
7 you know -- so the reverse is not true.

8 Giving opiates does not increase the  
9 rate of tolerance to these other drugs, whereas  
10 these other drugs increases the rate of  
11 tolerance to opiates. And that's been shown in  
12 the lab in, you know, various different  
13 experimental symptoms.

14 So that's why, if there is an  
15 exposure and you're seeing signs and symptoms  
16 of NAS, it is the opiate withdrawal that is the  
17 most prominent aspect. And you'll -- you'll  
18 see all of -- of the constellation that I  
19 mentioned, you know, the agitation, tremors,  
20 irritability, insomnia, seizures from the CNS  
21 hyperexcitability, all the GI symptoms that I  
22 mentioned and the autonomic instability with  
23 altered heart rate, respiratory rate,  
24 respiratory pattern, irregular respiratory

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1 patterns, you know, abnormal skin blood flow,  
2 excoriation of the skin, all of those things  
3 are the autonomic instability that -- so  
4 those -- although there may be some overlap in  
5 the signs and symptoms, the -- clinical  
6 diagnosis -- it's a clinical diagnosis based on  
7 everything that the child is manifesting.

8                   And it's fairly clear to any  
9 clinician to make that diagnosis.

10               Q.     Okay. So I'm going to read you a  
11 sentence from what's the article marked in  
12 Exhibit 13.

13               MR. BILEK: Yes, could you speak up  
14                   a little bit, I'm sorry --

15               MR. EHSAN: Sure.

16 BY MR. EHSAN:

17               Q.     I'll read you a sentence from what's  
18 been marked as Exhibit 13 and ask if you agree  
19 or disagree.

20               And this -- this states that:

21               MR. BILEK: What -- what page are  
22 you on?

23               MR. EHSAN: I'm on the first page.

24               MR. BILEK: Oh, I'm sorry.

1           A.     So, so I apologize, there is an  
2 updated version of this, but this doesn't seem  
3 to be the Exhibit Number 8.

4           Q.     So Exhibit 8 --

5           A.     This document was revised, and I  
6 can -- I can tell you, you know, how it was  
7 revised. I had taken out the and/ from each of  
8 those. It was A or B or C or D or E, and from  
9 E, I had taken out maternal blood, urine, and  
10 hair analysis.

11          Q.     Okay. So let's --

12          A.     For whatever reason, this was not  
13 the final document.

14          Q.     So let's back up, and we'll just  
15 take this step by step.

16                 So Exhibit 8 is in fact, though,  
17 your signed declaration of December 8, 2019,  
18 correct? Got your signatures, got that date?

19          A.     Yes, yeah.

20          Q.     However --

21          A.     Whatever -- yeah.

22          Q.     Okay. However, you believe or  
23 understand that there is a version of this  
24 document that is slightly different, at least

1 as it rely -- relates to Item Number 3, A, B,  
2 C, D and E; is that correct?

3 A. That is correct, yeah.

4 Q. And for the version that you believe  
5 was the updated version, the ands have been  
6 stricken and there are only ors; is that  
7 correct?

8 A. Yes.

9 Q. You answered -- you predicted one of  
10 my questions, what do the and/ors mean. The  
11 second is you said that maternal blood, urine,  
12 and hair analysis. Did you cut out urine and  
13 hair, or blood and hair?

14 A. All maternal blood, urine, and hair.  
15 It's simply based on the baby's umbilical cord  
16 blood and the baby's meconium testing.

17 Q. Okay. Any other changes?

18 A. No.

19 Q. Okay. So if a baby is -- meets any  
20 of these conditions, then that baby would be  
21 monitored; is that correct?

22 A. That is correct.

23 Q. And if appropriate, there would be  
24 intervention for that baby; is that correct?

1 weaning off of those medications?

2 A. The weaning off of those  
3 medications. So would -- the baby would be  
4 placed on tapering doses of those drugs, and,  
5 again, getting at the reticence of health care  
6 providers not charting the diagnosis, but using  
7 a treatment, which is clearly designed to treat  
8 NAS.

9 For example, a child with NAS, we  
10 wouldn't give, you know, cocaine or  
11 methamphetamine to. We would use opioids.

12 Q. Now, would that C capture children  
13 who had immediate postnatal surgery and were on  
14 morphine that was being tapered off because of  
15 post -- postsurgical pain management?

16 A. No.

17 Q. Okay. So it would only be children  
18 who are put on morphine, methadone,  
19 buprenorphine or other opioids for the purposes  
20 of addressing their symptom -- symptomatology  
21 not for the management of pain; is that  
22 correct?

23 A. That is correct.

24 Q. And then D says children who are

1 slightly differently:

2                   Would you believe that your  
3 monitoring program would eliminate the  
4 difficulties that children born with NAS will  
5 face as a result of health insurance issues or  
6 family structure issues or poverty issues?

7                   A. It will not eliminate those factors.

8                   What it will do is to provide for  
9 monitoring surveillance and support that is  
10 currently not being provided by the healthcare  
11 system or by the education system or by the  
12 social services system.

13                  The kind of evaluations that we have  
14 included in our monitoring surveillance  
15 protocol are not done routinely, and it will  
16 help to diagnose conditions early so that we  
17 can address them at a time when they are  
18 pliable to being overcome, not eliminated, but  
19 overcome.

20                  Q. Besides money, is there anything  
21 that prevents the healthcare system as it  
22 currently exists to provide the services you're  
23 suggesting?

24                  A. I think there is currently a lack of

1           Q.     Okay. So this language you have  
2 here parallels that of Doyle, correct?

3           A.     It is identical to that, and I give  
4 that reference just below.

5           Q.     Understood. But there is one  
6 specific change.

7                         In the sentence that starts "second"  
8 --

9           A.     Yeah.

10          Q.     -- if you look at your sentence, it  
11 says:

12                         Second, most of the developmental  
13 problems can be ameliorated.

14                         But if you look at the Doyle study,  
15 it says:

16                         Second, some problems can be  
17 ameliorated.

18                         Do you see that?

19          A.     That's right.

20          Q.     So you made that change; is that  
21 correct?

22          A.     That is correct.

23          Q.     And so does that mean you agree with  
24 what Doyle said or you disagree and wanted to